

### REMARKS

This communication responds to the Office Action mailed on July 1, 2004. The Applicants acknowledge that claims 16-24 have been withdrawn from consideration as a result of the election made by the Applicants in response to the Restriction Requirement of April 8, 2004. However, it is respectfully noted that the response to the Restriction Requirement, filed on May 10, 2004, also included a preliminary amendment adding new claims 25-28. In the instant response, no claims are amended, no claims are canceled, and no claims are added. As a result, claims 1-15 and 25-28 are now pending in this Application. Since the new claims were not addressed as part of the instant Office Action, the Applicants will assume that claims 25-28 are deemed allowable upon being re-written to include any rejected base or intervening claims.

If the Examiner is not convinced that the pending claims are in condition for allowance after reviewing this document, the courtesy of an Examiner's Interview is respectfully requested prior to preparing and mailing any Final Office Action.

#### §102 Rejection of the Claims

Claims 1, 2, 4-7 and 9 were rejected under 35 USC § 102(b) as being anticipated by DuPre et al. (U.S. 5,880,925; hereinafter "DuPre"). The Applicants do not admit that DuPre is prior art and reserve the right to swear behind this reference at a later date. In addition, because the Applicants assert that the Office has not shown that DuPre discloses the identical invention as claimed, the Applicants respectfully traverse this rejection of the claims.

It is respectfully noted that anticipation under 35 USC § 102 requires the disclosure in a single prior art reference of each element of the claim under consideration. *See Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). It is not enough, however, that the prior art reference discloses all the claimed elements in isolation. Rather, "[a]nticipation requires the presence in a single prior reference disclosure of each and every element of the claimed invention, *arranged as in the claim.*" *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added).

Regarding claim 1 (and claims 2, 4-7, 9, and 25-27 depending from claim 1), it is respectfully noted that DuPre does not disclose a “first vertically-oriented plate” or a “second vertically-oriented plate”. The Application states:

The term “horizontal”, for the purposes of this document, describes a direction which may include, or be parallel to, the substantially planar surface of a circuit board to which electronic components, including capacitors, are mounted. The term “vertical” refers to a direction which is substantially perpendicular to the horizontal direction. For example, the angle measured between the “vertical” side of a component and the circuit board surface to which the component is mounted should measure between about 80 degrees to about 100 degrees, being typically about 90 degrees. Some embodiments may comprise a capacitor having a plurality of vertical plates separated by one or more dielectric layers. Terminals may be connected to the plates along one side of the structure, typically the bottom side, which is a side of the plate bounding its surface area and proximate to a circuit board or other surface to which the capacitor may be attached. By constructing a capacitor in this manner, *the planar area of the plates can be increased without affecting the horizontal surface area required to mount the capacitor.*” Application, pg. 2, lines 9-23.

Thus, a vertically-oriented plate enables increased capacitance without increasing a capacitor’s horizontal form factor, even when the surface area of individual plates is increased. This can’t be accomplished using the horizontally-oriented plates taught by DuPre. See DuPre, FIGs. 4, 5, and 6; and Col. 5, lines 17-59. Therefore, DuPre does not disclose the presence of first and second “vertically-oriented” plates claimed by the Applicants in claims 1, 6, and 25-26. DuPre also does not disclose first and second pluralities of “vertically-oriented” plates claimed by the Applicants in claims 2, 4-5, and 27-28.

It is respectfully noted that “[t]he *identical invention* must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP § 2131 (emphasis added). Since DuPre does not teach the use of “vertically-oriented” plates, what is disclosed by DuPre is not identical to the subject matter of the embodiments claimed, and the rejection of claims 1-2, 4-7, and 9 under § 102 is improper. Reconsideration and allowance are respectfully requested.

§103 Rejection of the Claims

Claims 10-12 and 14 were rejected under 35 USC § 103(a) as being unpatentable over DuPre in view of Vercellotti et al. (U.S. 5,317,309; hereinafter "Vercellotti"). First, the Applicants do not admit that DuPre or Vercellotti are prior art, and reserve the right to swear behind these references in the future. Second, since a *prima facie* case of obviousness has not been established in each case, the Applicants respectfully traverse these rejections.

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d (BNA) 1596, 1598 (Fed. Cir. 1988). In combining prior art references to construct a *prima facie* case, the Examiner must show some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art that would lead an individual to combine the relevant teaching of the references. *Id.* The M.P.E.P. contains explicit direction to the Examiner that agrees with the *In re Fine* court:

In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellant's disclosure. *M.P.E.P.* § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d (BNA) 1438 (Fed. Cir. 1991)).

An invention can be obvious even though the suggestion to combine prior art teachings is not found in a specific reference. *In re Oetiker*, 977 F.2d 1443, 24 U.S.P.Q.2d (BNA) 1443 (Fed. Cir. 1992). However, while it is not necessary that the cited references or prior art specifically suggest making the combination, there must be some teaching somewhere which provides the suggestion or motivation to combine prior art teachings and applies that combination to solve the same or similar problem which the claimed invention addresses. One of ordinary skill in the art will be presumed to know of any such teaching. (See, e.g., *In re Nilssen*, 851 F.2d 1401, 1403, 7 U.S.P.Q.2d 1500, 1502 (Fed. Cir. 1988) and *In re Wood*, 599 F.2d 1032, 1037, 202 U.S.P.Q. 171, 174 (C.C.P.A. 1979)). However, the level of skill is not that of the person who is an innovator but rather that of the person who follows the conventional wisdom in the art. *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 474, 227

U.S.P.Q. 293, 298 (Fed. Cir. 1985). The requirement of a suggestion or motivation to combine references in a *prima facie* case of obviousness is emphasized in the Federal Circuit opinion, *In re Sang Su Lee*, 277 F.3d 1338; 61 U.S.P.Q.2D 1430 (Fed. Cir. 2002), which notes that the motivation must be supported by evidence in the record.

No proper *prima facie* case of obviousness has been established because (1) combining the references does not teach all of the limitations set forth in the claims, (2) there is no motivation to combine the references, and (3) combining the references provides no reasonable expectation of success. Each of these points will be explained in detail, as follows.

***Combining References Does Not Teach All Limitations:*** With respect to independent claim 10, no combination suggested in the Office Action will render all of the claim limitations. As noted above, DuPre does not disclose “vertically-oriented” plates, as claimed by the Applicants. Neither does Vercellotti.

Vercellotti is directed to an electronic identification system for persons and objects. *See* Vercellotti, Col. 1, lines 9-11. An identification tag 4 includes a power supply 13 with a capacitor 21 that is charged so that a battery 19 can be turned off. *See* Vercellotti, FIG. 2; and Col. 4, lines 25-29. Power can be provided to the tag 4 via the battery 19, capacitor 21, or a loopstick 18. *See* Vercellotti, Col. 5, lines 6-13. No description of the internal construction of the capacitor 21 is provided. Thus, Vercellotti does not describe “vertically-oriented” plates.

***No Motivation to Combine References:*** The Office asserts that one would be motivated to combine DuPre with Vercellotti because it would be obvious “to use DuPre’s capacitor into [sic] the Vercellotti electronic system in order to improve the performance for the electronic system.” However, this assertion is incorrect. Vercellotti already provides a capacitor to retain a charge to power the identification tag. Nothing in Vercellotti indicates that adding the capacitor of DuPre will further “improve the performance” of Vercellotti, as asserted in the Office Action. Thus, there is no motivation to combine DuPre with Vercellotti.

The use of unsupported assertions in the Office Action does not satisfy the explicit requirements needed to demonstrate motivation as set forth by the *In re Sang Su Lee* court. Therefore, the Examiner appears to be using personal knowledge, and is respectfully requested to submit an affidavit as required by 37 C.F.R. § 1.104(d)(2).

***No Reasonable Expectation of Success:*** Modifying Vercellotti to implement the capacitor described by DuPre may actually increase the cost and size of the Vercellotti system, rather than providing the “low cost” and “small size” sought by Vercellotti. *See* Vercellotti, Col. 2, lines 9-12. Further, any combination of DuPre and Vercellotti will not provide a system that has capacitors with “vertically-oriented” plates. Thus, there is no reasonable expectation that any combination of DuPre and Vercellotti will be able to provide the missing elements, or meet the expectations expressed in the cited art.

The test for obviousness under § 103 must take into consideration the invention as a whole; that is, one must consider the particular problem solved by the combination of elements that define the invention. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 U.S.P.Q. 543, 551 (Fed. Cir. 1985). References must be considered in their entirety, including parts that teach away from the claims. *See* MPEP § 2141.02. The fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 16 USPQ2d 1430 (Fed. Cir. 1990); M.P.E.P. § 2143.01.

Therefore, since there is no evidence in the record to support disclosure by either DuPre or Vercellotti of “vertically-oriented” plates, since there is no motivation to supply the missing elements (since the references teach away from such a combination), and since no reasonable expectation of success arises, a *prima facie* case of obviousness has not been established with respect to independent claim 10. This conclusion also applies to dependent claims 11-12, and 14 since any claim depending from a nonobvious independent claim is also nonobvious. It is therefore respectfully requested that the rejections of claims 10-12 and 14 under 35 U.S.C. § 103 be reconsidered and withdrawn.

***Allowable Subject Matter***

Claims 3, 8, 13 and 15 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As noted above, the Applicants assume this is also the case with respect to claims 25-28. In light of the arguments presented above, the

Applicants believe all claims are in condition for allowance. Therefore, the objection is moot, and claims 3, 8, 13, 15, and 25-28 have not been rewritten.

### CONCLUSION

The Applicants respectfully submit that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone the Applicants' attorney, Mark Muller at (210) 308-5677, or the Applicants' below-named representative at (612) 349-9592 to facilitate prosecution of this Application.

As noted above, if the Examiner is not convinced that the pending claims are in condition for allowance after reviewing this document, the courtesy of an Examiner's Interview is respectfully requested prior to preparing and mailing any Final Office Action. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

HYUNJUN KIM ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
Attorneys for Intel Corporation  
P.O. Box 2938  
Minneapolis, Minnesota 55402  
(612) 349-9592

Date Sept. 1, 2004

By Ann M. McCrackin  
Ann M. McCrackin  
Reg. No. 42,858

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this \_\_\_1st\_\_\_ day of September, 2004

Chris Hammond

Name

Chris Hammond

Signature